

CLAIMS:

1. A method for forming an ink-receptive substrate comprising the steps of:

5 forming a melt-processable base layer from a water-insoluble thermoplastic polymer; and
simultaneously forming an ink-receptive layer over the base layer from a blend of a water-soluble polymer and a substantially water-insoluble polymer, wherein the ink-receptive
10 layer provides a printable surface that is inherently ink-receptive without subsequent treatment.

2. The method as recited in claim 1, further comprising the step of forming a tie layer over the base layer before the
15 step of forming the ink-receptive layer, the tie layer being formed from a thermoplastic polymer and being formed simultaneously with the base layer and ink-receptive layer.

3. The method as recited in claim 1, further comprising
20 the step of forming an adhesive layer over a surface of the base layer opposite from the ink-receptive layer to provide a label.

4. The method as recited in claim 1, wherein the base layer and ink-receptive layer are formed by coextrusion.

25

5. The method as recited in claim 1 wherein the substantially water-insoluble polymer is a polyolefin, and the water-soluble polymer is selected from the group of compounds

consisting of polyvinyl alcohols, polyalkyl oxazolines,
polyphenyl oxazolines, polyvinyl pyrrolidones, polyacrylic-
acids, polymethyl methacrylates, polymethacrylic acids, styrene
maleic anhydrides, alkyl celluloses, carboxyalkyl celluloses,
5 hydroxyalkyl celluloses, polyethylene oxides, polyethylene-
imines, and mixtures thereof.